CLAIMS

1. Compounds which bind the G-quadruplex structure of telomers, characterized in that they correspond to the following general formula:

nitrogen-containing aromatic ring - NR_3 - distribution agent - NR'_3 - aromatic ring

in which

• the nitrogen-containing aromatic ring represents:

◊ a quinoline optionally substituted with at least one group N(Ra)(Rb) in which Ra and Rb, which are identical or different, represent hydrogen or a short-chain C1-C4 alkyl and/or alkoxy radical and/or

◊ a quinoline possessing a nitrogen atom in quaternary form or

◊ a benzamidine or

◊ a pyridine

• the aromatic ring represents

◊ a quinoline optionally substituted with at least one group N(Ra)(Rb) in which Ra and Rb, which are identical or different, represent hydrogen or a short-chain C1-C4 alkyl and/or alkoxy radical and/or

◊ a quinoline possessing a nitrogen atom in quaternary form or

◊ a benzamidine or

◊ a pyridine or

◊ a phenyl ring optionally substituted at the meta or para position with a halogen group, C1-C4 alkoxy group, cyano group, carbonylamino group optionally substituted with one or more C1-C4 alkyl groups, guanyl groups, C1-C4 alkylthio groups, amino groups, C1-C4 alkylamino groups, C1-C4 dialkylamino groups for each alkyl group, nitro group, alkylene-amino group or alkenyleneamino group or

◊ a mono- or bi- or tricyclic heterocyclic ring comprising 0 to 2 heteroatoms per ring provided that at least one heteroatom is present in at least one ring optionally substituted with one or more C1-C4 alkyl groups or with alkylene or alkenylene groups

- R3 and R'3, which are identical or different, represent independently of one another hydrogen or a C1-C4 alkyl radical
- the distribution agent represents:

  ◊ a triazine group optionally substituted with an alkyl radical having 1 to 4 carbon atoms, a thio, oxy or amino radical which are themselves optionally substituted with one or more short-chain alkyl chains

containing 1 to 4 carbon atoms or a halogen atom or

◊ a carbonyl group or

◊ a group C(=NH)-NH-C(=NH) or

◊ an alkyldiyl group containing 3 to 7 carbon atoms or

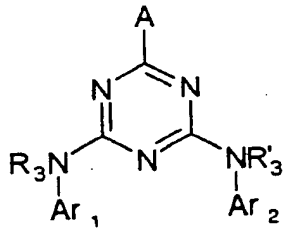
◊ a diazine group optionally substituted with the same groups as the triazine

or one of its salts.

2. Compounds according to Claim 1, characterized in that the distribution agent is chosen from the triazine or diazine groups.

3. Compounds according to Claim 2, characterized in that the diazine groups are pyrimidines.

4. Compounds according to Claim 1, characterized in that they correspond to formula (I) below:



in which:

- A represents

• an amino group of formula NR1R2 in which R1 and R2, which are identical or

different, represent hydrogen or a straight or branched alkyl group containing 1 to 4 carbon atoms or

- a group OR1 or SR1 in which R1 has the same meaning as above or
- an alkyl group containing 1 to 4 carbon atoms or a trifluoromethyl group or
- a hydrogen atom or
- a halogen atom chosen from fluorine, chlorine, bromine or iodine

- R3 and R'3, which are identical or different, represent independently of one another hydrogen or a C1-C4 alkyl group

- Ar_1 and Ar_2, which are identical or different, represent

1. when Ar_1 and Ar_2 are identical:
   - a quinoline motif optionally substituted with at least one group N(Ra)(Rb) in which Ra and Rb, which are identical or different, represent hydrogen or a short-chain alkyl and/or alkoxy radical containing 1 to 4 carbon atoms or
   - a quinoline possessing a nitrogen atom in quaternary form or
   - a benzamidine or
   - a pyridine attached at the 4-position or fused with an aryl or heteroaryl

group optionally substituted with a C1-C4 alkyl group

2. when Ar_1 and Ar_2 are different

- Ar_1 and Ar_2 both represent one of the possibilities mentioned above for Ar_1 and Ar_2 or
- Ar_1 represents one of the above possibilities and Ar_2 represents
  * a phenyl ring optionally substituted at the meta or para position with a halogen group, C1-C4 alkoxy group, cyano group, carbonylamino group optionally substituted with one or more C1-C4 alkyl groups, guanyl groups, C1-C4 alkylthio groups, amino groups, C1-C4 alkylamino groups, C1-C4 dialkylamino groups for each alkyl group, nitro group, alkyleneamino group or alkenyleneamino group
  * a mono- or bi- or tricyclic heterocyclic ring comprising 0 to 2 heteroatoms per ring provided that at least one heteroatom is present in at least one ring optionally substituted with one or more C1-C4 alkyl groups or with alkylene or alkenylene groups

or one of its salts.

5. Compounds according to Claim 3, characterized in that Ar_1 and Ar_2 represent a group chosen from the following groups: 4-amino- or 4-methylamino- or 4-dimethylamino-quinolyl or -quinolinium in which the quinolinium ring is optionally substituted with a methyl group.

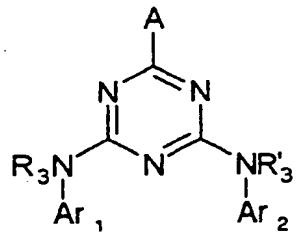
6. Compounds according to Claim 1, characterized in that the groups R1 and R2 represent the methylthio, amino, alkylamino or dialkylamino radical, in which radicals the alkyl groups possess 1 to 4 carbon atoms.

7. Compounds according to Claim 2, characterized in that A represents a methylthio group.

8. Compounds of Claim 1, characterized in that they have a telomerase-inhibiting activity.

9. Compounds according to any one of the preceding claims, characterized in that they have an anticancer activity.

10. Novel compounds corresponding to the following formula (I):



in which:

- A represents

• an amino group of formula NR1R2 in which R1 and R2, which are identical or different, represent a straight or branched alkyl group containing 1 to 4 carbon atoms or

• a group OR1 or SR1 in which R1 represents hydrogen or has the same meaning as above or

• an alkyl group containing 1 to 4 carbon atoms or a trifluoromethyl group or

• a hydrogen atom or

• a halogen atom chosen from fluorine, chlorine, bromine or iodine

- R3 and R'3, which are identical or different, represent independently of one another a hydrogen atom or a C1-C4 alkyl group

- Ar_1 and Ar_2, which are identical or different, represent

1. when Ar_1 and Ar_2 are identical:

• a quinoline motif optionally substituted with at least one group N(Ra)(Rb) in which Ra and Rb, which are identical or different, represent hydrogen or a short-chain alkyl and/or alkoxy radical containing 1 to 4 carbon atoms and/or

• a quinoline possessing a nitrogen atom in quaternary form or

- a benzamidine except in the case where A represents diethylamine, hydrogen or an amine group
- a pyridine attached at the 4-position or fused with an aryl or heteroaryl group optionally substituted with a C1-C4 alkyl group

2. when Ar_1 and Ar_2 are different
   - Ar_1 and Ar_2 both represent one of the possibilities mentioned above for Ar_1 and Ar_2 or
   - Ar_1 represents one of the above possibilities and Ar_2 represents
     * a phenyl ring optionally substituted at the meta or para position with a halogen group, C1-C4 alkoxy group, cyano group, carbonylamino group optionally substituted with one or more C1-C4 alkyl groups, guanyl groups, C1-C4 alkylthio groups, amino groups, C1-C4 alkylamino groups, C1-C4 dialkylamino groups for each alkyl group, nitro group, alkyleneamino group or alkenyleneamino group
     * a mono- or bi- or tricyclic heterocyclic ring comprising 0 to 2 heteroatoms per ring provided that at least one heteroatom is present in at

least one ring optionally substituted with one or more C1-C4 alkyl groups or with alkylene or alkenylene groups

or one of its salts excluding 2-amino-bis-4,6-[(4'-amino-6'-quinaldinyl)amino]triazine dihydrochloride and 2-amino-bis-4,6-(p-amidinoanilino)triazine dihydrochloride.

11. Compounds according to Claim 10, characterized in that when Ar_1 and Ar_2 are identical, Ar_1 and Ar_2 represent a group chosen from 4-amino- or 4-methylamino- or 4-dimethylamino-quinolyl or -quinolinium groups in which the quinolinium ring is optionally substituted with a methyl group.

12. Compounds according to Claim 10, characterized in that R1 and R2 represent hydrogen.

13. Compounds according to Claim 10, characterized in that A represents a methylthio group.

14. Compounds according to Claim 10, characterized in that when Ar_1 and Ar_2 are different

1. Ar_1 represents:

- a quinoline motif substituted with at least one group N(Ra)(Rb) in which Ra and Rb, which are identical or different, represent hydrogen or a short-chain alkyl or alkoxy radical containing 1 to 4 carbon atoms and/or
- a quinoline possessing a nitrogen atom in quaternary form or

- a benzamidine except in the case where A represents diethylamine, hydrogen or an amine group or
- a pyridine attached at the 4-position or fused with an aryl or heteroaryl group

2. Ar_2 represents

* a ring as defined above but different or
* a phenyl ring optionally substituted at the meta or para position with a halogen, methoxy, cyano, carbonyl-amino, guanyl, methylthio, amino, methylamino, dimethylamino, morpholine, alkyleneamino or alkenyleneamino group
* a quinoline, benzimidazole, indole, benzothiophene, benzofuran, benzothiazol, benzoxazol, carbazol, quinazoline or quinoxaline ring optionally substituted with one or more C1-C4 alkyl groups or with alkylene or alkenylene groups

or one of its salts excluding 2-amino-bis-4,6-[(4'-amino-6'-quinaldinyl)amino]triazine dihydrochloride and 2-amino-bis-4,6-(p-amidinoanilino)-triazine.

15. Compounds according to Claim 10 chosen from:

- 2-amino-bis-4,6-[(1'-methyl-4'-amino-6'-quinaldinio)amino]triazine dichloride
- 2-amino-bis-4,6-[(1'-ethyl-4'-amino-6'-quinaldinio)amino]triazine dichloride
- 2-dimethylamino-bis-4,6-[(1'-methyl-4'-amino-6'-quinaldinio)amino]triazine dichloride
- 2-methylamino-bis-4,6-[(4'-amino-6'-quinaldinyl)amino]triazine trihydrochloride
- 2-amino-bis-4,6-[(1'-methyl-6'-quinolinio)-amino]triazine dichloride
- 2-methylamino-bis-4,6-[(4'-methylamino-6'-quinaldinyl)amino]triazine dichloride trihydrochloride
- 2-amino-bis-4,6-[(9'-amino-10'-methyl-2'-acridinio)amino]triazine dichloride hydrochloride
- 2-methylthio-bis-4,6-[(1'-methyl-4'-amino-6'-quinaldinio)amino]triazine dichloride
- 2-chloro-bis-4,6-[(4'-dimethylamino-6'-quinaldinyl)amino]triazine dihydrochloride dihydrate
- 2-methylthio-bis-4,6-[(4'-dimethylamino-6'-quinaldinyl)amino]triazine hydrate
- N,N'-(4-amino-6-quinaldinyl)urea dihydrochloride
- N^1,N^5-bis(7-chloro-1-methyl-4-quinolinio)-pentane-1,5-diamine diiodide

- bis-2,4-[(4'-amino-6'-quinaldinyl)amino]-pyrimidine trihydrochloride pentahydrate

- 1,5-(4'-amino-6'-quinaldinyl)biguanide trihydrochloride dihydrate.

16. Compounds according to Claim 15 chosen from:

- 2-methylthio-bis-4,6-[(4'-dimethylamino-6'-quinaldinyl)amino]triazine hydrate

- 2-chloro-bis-4,6-[(4'-dimethylamino-6'-quinaldinyl)amino]triazine dihydrochloride dihydrate

- 6-[4-(4-amino-2-methylquinolin-6-ylamino)-6-methylsulphanyl-[1,3,5]triazin-2-ylamino]-2-methyl-quinolin-4-ol

- N6-[4-(4-dimethylamino-2-methylquinolin-6-ylamino)-6-methylsulphanyl-[1,3,5]triazin-2-yl]-2-methylquinoline-4,6-diamine

- N6-[4-(4-amino-2-methylquinolin-6-ylamino)-6-methylsulphanyl-[1,3,5]triazin-2-yl]-2-methyl-quinoline-4,6-diamine

- N6-[4-(4-methoxy-2-methylquinolin-6-ylamino)-6-methylsulphanyl-[1,3,5]triazin-2-yl]-4-methoxy-2-methylquinolin-6-amine.

17. Use of the compounds of Claim 10 as pharmaceutical product for human use.

18. Therapeutic combinations consisting of a compound according to Claim 1 and of another anticancer compound.

19. Combinations according to Claim 18, characterized in that the anticancer compound is chosen from alkylating agents, platinum derivatives, antibiotic agents, antimicrotubule agents, anthracyclines, group I and II topoisomerases, fluoropyrimidines, cytidine analogues, adenosine analogues, various enzymes and compounds such as L-asparaginase, hydroxyurea, trans-retinoic acid, suramine, irinotecan, topotecan, dexrazoxane, amifostine, herceptin as well as oestrogenic and androgenic hormones.

20. Therapeutic combination consisting of a compound according to Claim 1 and of radiation.

21. Combinations according to any one of Claims 18 to 20, characterized in that each of the compounds or treatments is administered simultaneously, separately or sequentially.